

COAL MINING

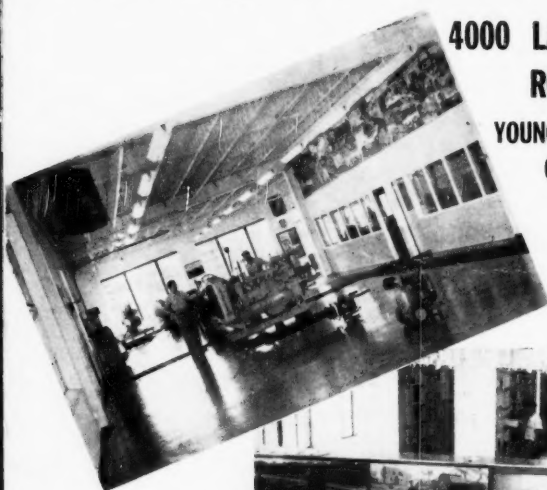
"The Picture-Book of the Industry"

SEPTEMBER 1949

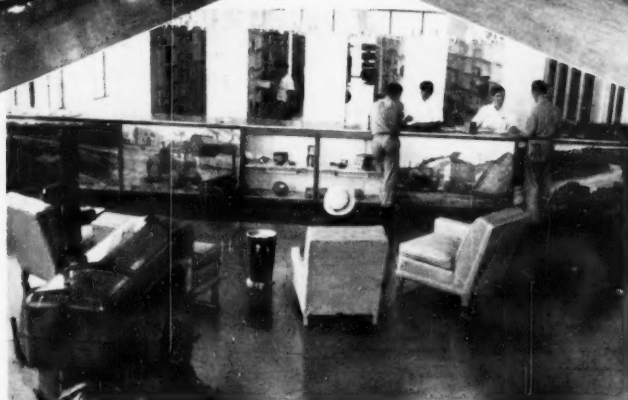
VOLUME XXVI, No. 9

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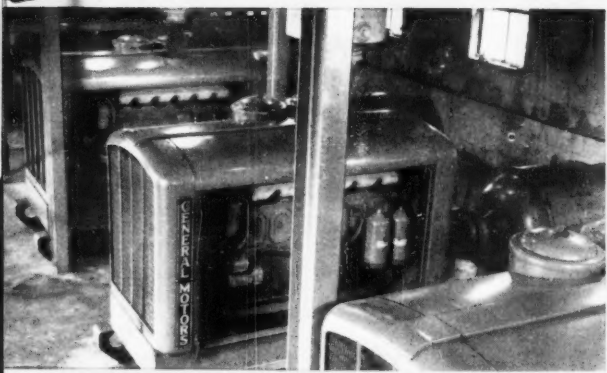
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COAL MINING

Vol. XXVI

SEPTEMBER, 1949

No. 9

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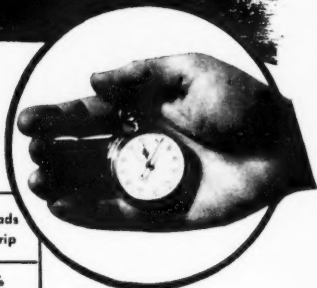
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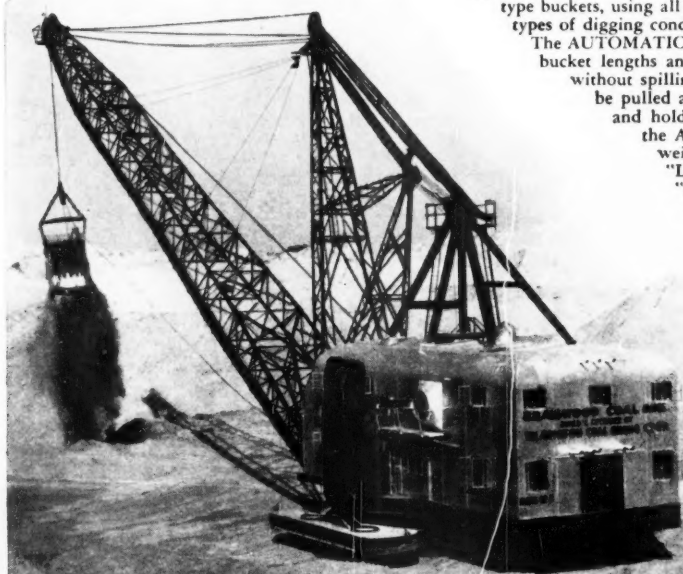
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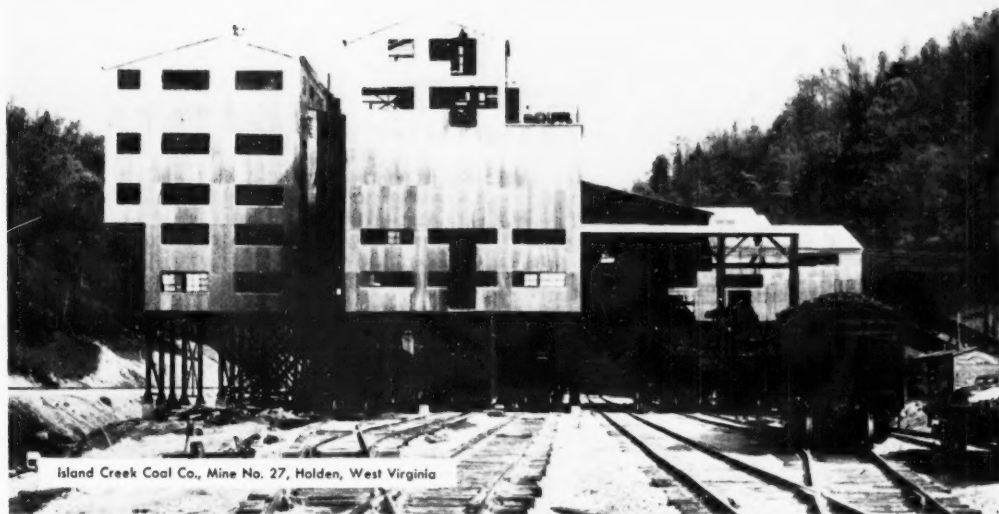
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with modern plants constructed by *Roberts and Schaefer Co.*

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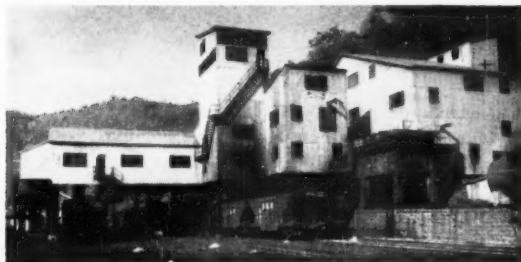
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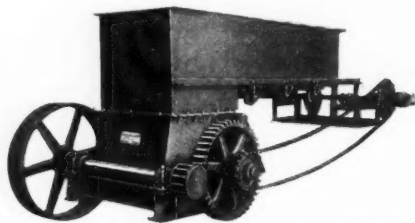
**ENABLES THE STRIP OPERATORS TO MEET RIGID COMPETITION WITH
A CONSTANT, UNIFORM PRODUCT AND LOW PRODUCTION COSTS ...**



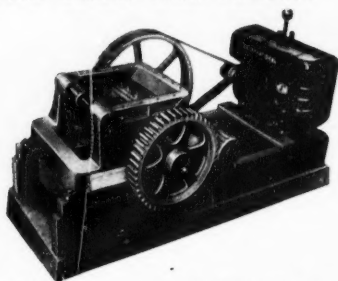
The entire plant is easily dismantled into several units for transporting from one location to another. This is particularly important in present surface mining operations where only a limited tonnage is available, in one location.

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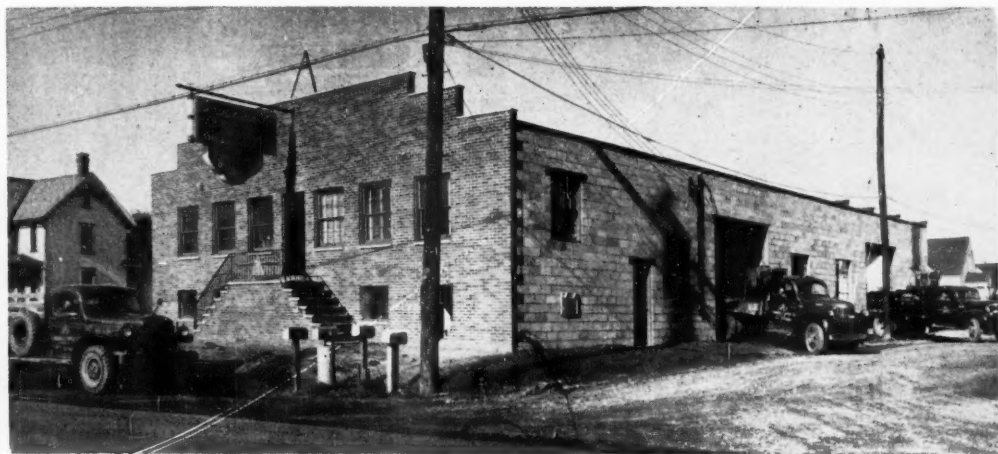
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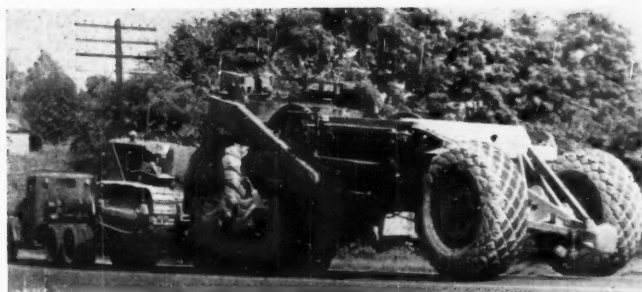


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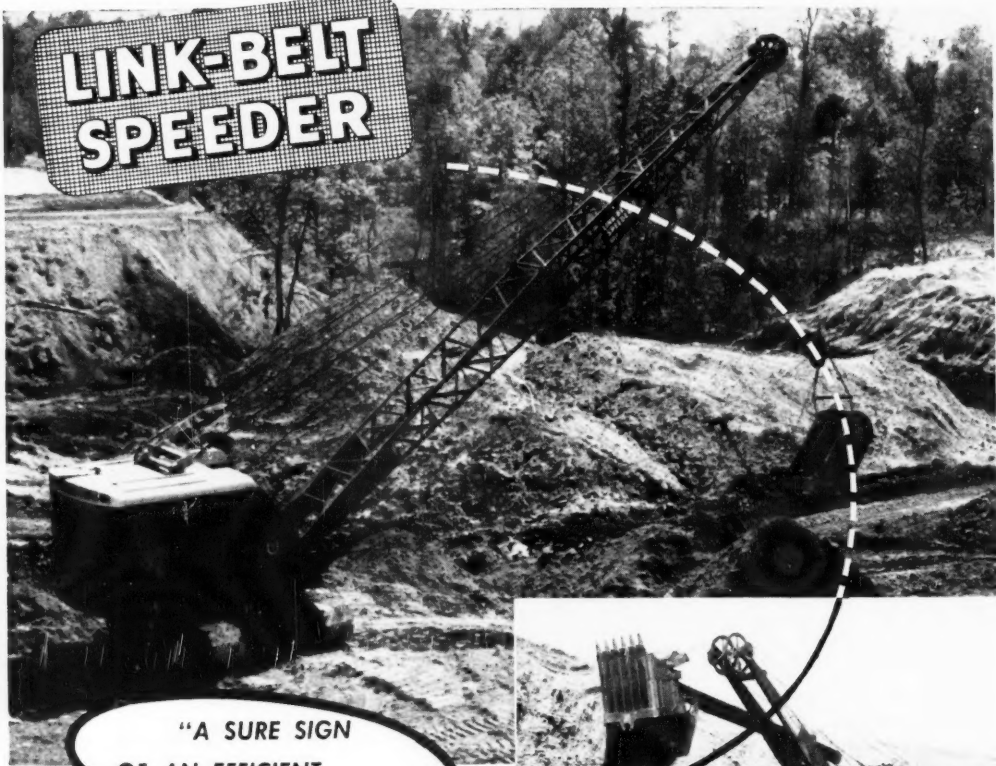
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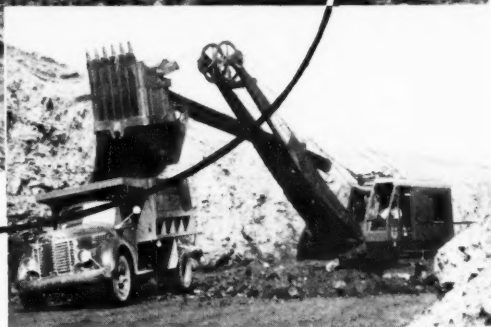
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"A SURE SIGN
OF AN EFFICIENT
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↑
K-360 Dragline at strip mine
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→ Using a 2¾ yard bucket, this
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Service-satisfaction accounts for the large proportion of Link-Belt Speeder Shovel-Cranes found in every strip-mine area, removing overburden and loading out coal. Operators like the ease of handling these powerful machines, equipped with Speed-O-Matic full hydraulic controls, the ready accessibility of all parts needing attention, and the simplicity of the few necessary adjustments. Owners praise their low cost operation and upkeep, their freedom from trouble and the courteous, helpful service of the conveniently located distributors.

Advanced engineering, rugged construction, extra strength and power add up to a good margin of profit.

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 This monstrous power-shovel bucket
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To date more than 6,000,000 cu.
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many more months of service before
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J&L heat-treated JALLOY STEEL
 was developed for just such uses as
 this—where steel must withstand
 extreme abrasion and heavy shock
 for long periods of time. Its outstanding
 wear-resistant properties make it
 especially useful for

Scrapers . . . Rock crushers . . . Bulldozers . . . Truck bodies . . . Dump cars . . . Chutes . . . Power-shovel buckets.

Wherever wear and abrasion are limiting factors in the life of equipment, you'll find it profitable to use J&L heat-treated JALLOY STEEL. May we send you the booklet mentioned in the coupon?

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DO YOU KNOW

For the prevention of personal injuries in American industries, safety education should begin in the elementary schools. Accident prevention in industry rests upon a strong foundation of general safety knowledge gained largely through impressions made in these schools, according to a committee report made to the President's Conference on Industrial Safety.

It was pointed out at the meeting that in the larger industrial plants safety activity is considerably better than in the smaller plants. Definitely, the major problem in safety education in the industries themselves is the difficulty of adequately reaching the smaller establishments.

Thousands of daily personal accidents could be prevented by proper cooperation on the part of management and employees. Management must provide adequate safeguards, including both mechanical and personal equipment. Employees must understand that they are required to work safely, and they must be taught and constantly encouraged to do so.

Management, supervision and the employee must understand, accept and discharge their respective responsibilities in the prevention of personal injuries. Accidents demand, not only a tragic toll of human suffering, but also a needless heavy financial cost as well.

Add electret to your science vocabulary. It is something in wax that is not supposed to exist—but does. Electret is described as an electrical counterpart to a permanent magnet, and it has a decided advantage over magnets for use in some instruments because of lightness.

An electret still "alive" after 12 years is described in the current issue of *Physics Today*, published here by the American Institute of Physics, by Dr. Andrew Gemant of the Detroit Edison Company. Interest in electrets is growing, he said.

Electrets are made of a special kind of wax in which positive and negative charges can migrate while it is soft but are somehow frozen in place when it hardens. The wax is allowed to harden while in a strong electric field, and it retains its charges, if properly handled, for a very long time. The treated wax carries a permanent positive charge at one surface, and permanent negative charge at the opposite surface.

The basic material most commonly used to make electrets is carnauba wax often mixed with rosin. The term electret is not entirely new. It has been used by a few scientists for several decades. The electret is not a battery. It is merely a device to produce an electrostatic field.

Walter Eadie, Mine Manager of Orient Mine No. 2 of the Chicago, Wilmington & Franklin Coal Company, has been appointed Director of the Illinois State Department of Mines and Minerals. His appointment will take effect as soon as it is confirmed by the State Senate. He is 59 years of age, a veteran of 43 years' service in the Illinois coal mining industry. A native of Illinois, he started his career as a miner.

Here and There

Samuel A. Crozier was elected president of the Crozer Coal & Land Co. and of the Page Coal & Coke Co.

Mr. Edward J. Burnell, vice-president & general sales manager and director, of Link-Belt Company, died at his home in Winnetka, Ill., on Friday, July 22, after an illness of several months.



Edward J. Burnell

Mr. Burnell was born in Tondur, Wales, Great Britain, April 7, 1888. He came to this country with his family and lived in Catasauqua, Pa., where he is being buried. He was graduated from Lehigh University in 1910.

We have been advised of the death of W. B. Prescott, Vice President of the Goodman Coal Corporation, with offices in the Rockefeller Building, Cleveland, Ohio. Mr. Prescott was one of the old timers, widely known throughout the selling and operating ends of the industry. He will be greatly missed by his host of friends.

James D. Francis was elected Chairman of the Board of Directors of the Island Creek Coal Company and Subsidiary Companies. R. A. Salvati was elected President and H. L. Glover was elected Vice President.

Mr. R. H. Moore, Vice President of the Rich Hill Coal Corporation, Cresson, Pa., was appointed to the Safety Committee of the National Coal Association, filling the place left vacant by the death of Mr. Charles O'Neill.

Dr. J. J. Rutledge, Chief, Department of Mines of Maryland, has returned. Frank J. Powers has been named to succeed Dr. Rutledge. The office of this department has been moved from Annapolis, Md., to the City Building, Westernport, Md.

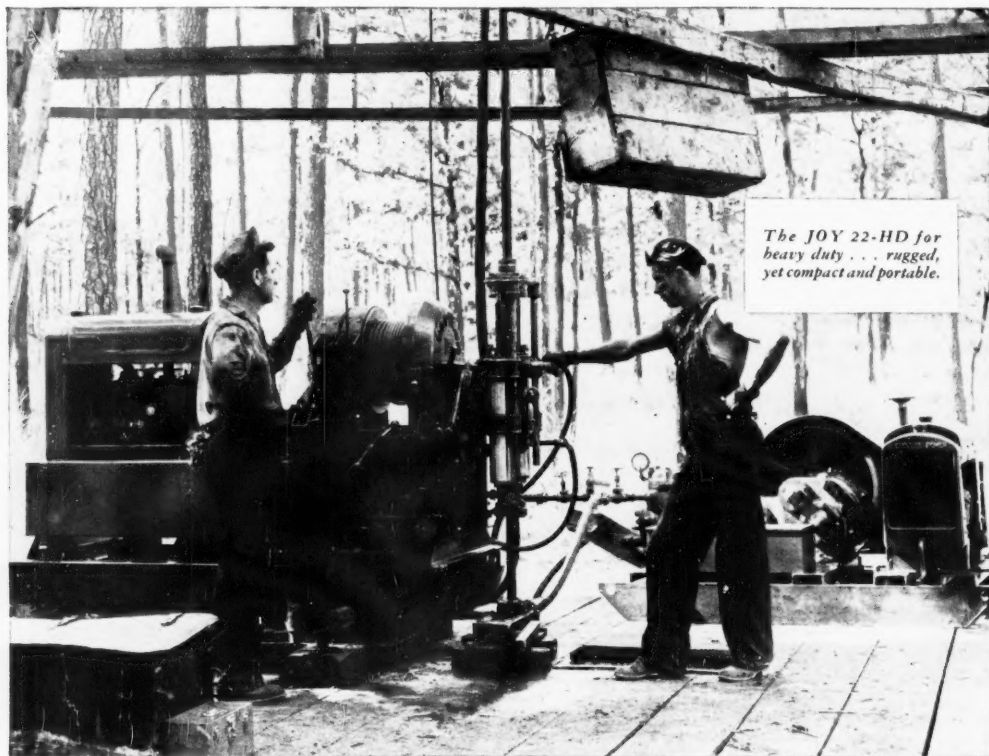
At a recent meeting of the Greenbrier Coal Operators Association at Rainelle, West Virginia, the following officers were elected: W. E. Sellards, Rainelle, W. Va., President; C. E. Hough, Rainelle, W. Va., Vice President; and Harold W. Yates, Rainelle, W. Va., Secretary and Treasurer.

Robert M. Fleming, General Manager of the Ebensburg Coal Company, retired on September 1. Mr. Fleming will be succeeded by Thomas L. Aitkin, who has also had a number of years of experience in the bituminous coal mining industry of Pennsylvania.

Mr. W. J. Richards, one of the grand old men of the coal industry, died at Pottsville, Pa., at the age of 86. He was president of the Philadelphia & Reading Coal & Iron Company and was Chairman of the Board of the Ashland Coal & Coke Company. The Pemberton Coal & Coke Company, and the Sovereign Pocahontas Company of West Virginia.

Mr. James L. Hamilton, Vice President in Charge of Operations of the Island Creek Coal Company, announces the retirement of Mr. J. A. Saxe, Director of Engineering of the Island Creek Coal Company, Pond Creek Pocahontas Company, and Marianna Smokeless Coal Company, in accordance with the company retirement annuity plan. Mr. Saxe assumed the duties of Director of Engineering for these companies in July, 1940 and was formerly Chief Engineer for the Industrial Collieries Company at Elsworth, Pennsylvania. Mr. Hamilton further announces the promotion of Mr. F. C. Menk to the position of Director of Engineering vacated by Mr. Saxe. Mr. Menk has been employed by Island Creek Coal Company, Pond Creek Pocahontas Company, and Marianna Smokeless Coal Company and affiliated companies since 1936.

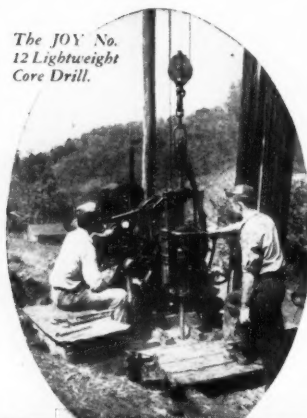
Mr. Menk will assume his new duties as of October 1, 1949.



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at LOWEST COST*

The JOY No. 12 Lightweight Core Drill.



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One of the deeper coal strip operations in the Southern Region of the Anthracite field. Up to 400 feet of rock overburden is sometimes moved to recover 5 to 6 smaller seams and the Mammoth seam which sometimes runs more than 100 feet in thickness.

Recent Developments In Anthracite Stripping

Automatic machinery in the coal stripping industry appears to remain in the dream stage.

AUTOMATIC machinery in industry is only so far away as our willingness to put the necessary effort into the engineering required to

bring it about.

Thermostats, self propelled missiles that seek their target, anti-aircraft fire control systems, ultra-rapid computing machines are no longer the dream of a sensationalist, nor the hope of some future time. They are

a collection of effective mechanical devices for performing human labor. They are new developments with unlimited possibilities for the human race.

Our first industrial revolution resulted in the devaluation of human



Showing a folded seam of anthracite coal at the surface, near Hazelton, Pa.



Here is shown a 40 ft. pillar of the bottom split of the Mammoth seam running 35 feet thick, near Shenandoah. At this point the coal lies about 90 feet under rock.

power in competition with the machine. There is no longer any pick and shovel labor pay that is low enough to compete with our present excavating machinery. The modern industrial revolution will not only devalue human power still more, but will even devalue the human brain in its simpler and routine decisions.

It is true that each form of organization has a top limit beyond which it will not function. A suspension bridge built of materials with given elastic properties will collapse under its own weight beyond a certain span.

The coal stripping industry has not even begun to apply automatism to its machinery and has a long way to go before it begins to approach

the top limits of the functions of such machinery.

In the Anthracite region, where 25 cubic yard draglines were making stripping history two years ago, motor haulage of overburden appears to be displacing this large dragline. Although the dragline is limited in the work it can do, automatic operation should increase its usefulness tremendously.

The larger anthracite stripping operations are still located in the Southern field of the region, principally recovering pillar coal left in deep mining. At one of the operations close to 70,000,000 cubic yards of overburden will be moved to recover more than 11,000,000 tons of rough

cleaned coal. Another operation has been started at which approximately 95,000,000 cubic yards of overburden will be moved to get approximately 15,000,000 tons of pillar coal. Neither of these operations is using the large dragline in moving overburden. Both are using small electrically driven shovels, developed several years ago, to load rock into Euclid Diesel driven trucks for hauling to the spoil bank.

Contrary to the general belief outside the anthracite region there is enough of that coal in the earth to last at least fifty years at the present rate of consumption. New separation techniques are enabling the recovery of fine sizes from old silt banks which will add to tonnage each year.



Map showing the three producing coal fields in the Anthracite region



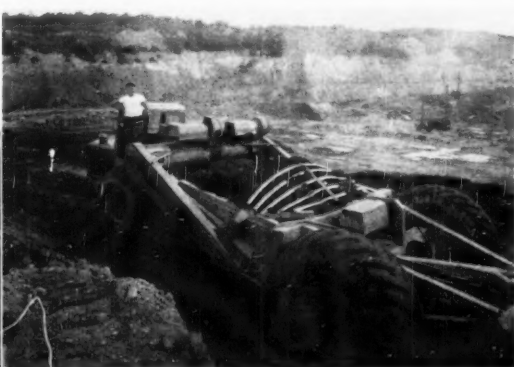
One of sixty-four twenty-two-ton Euclid Diesel trucks being loaded with rock overburden at the operation in the southern region.



Dumping the twenty-two tons of overburden and spoils pile. Average dept of rock cover is 250 feet. Hauls run about 2000 feet.



Pusher loading one of the 3 new Tournapull which move soft top cover at the Mammoth Coal Co., Raven Run, Pa.



Looking down on a loaded Tournapull at Mammoth Coal Company, Raven Run, Pa.



Drilling units and P & H electrically driven rock shovel in main pit at Mammoth Coal Company, Raven Run, Pa.



Page 620S dragline with 8 yd. bucket moving rock overburden at Mammoth Coal Company, Raven Run, Pa.



Ten yard dragline moving overburden at the St. Clair operation of J. Robert Bazley, Inc.



P & H Model 955 Shovel loading out the Mammoth seam of coal at the St. Clair operation of J. Robert Bazley, Inc.



Caterpillar road patrols maintaining haul road in the southern region.



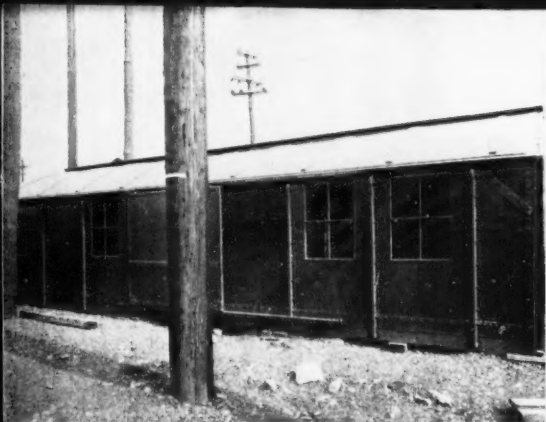
Large operations must provide haulroad passes under County roads.



One of 2 Model 595 Link-Belt Speeder draglines equipped with 2½ yard Page bucket at operation of the Merry Coal Co. near Centralia.



Yeager Compressor is used for Jackhammer drilling at the Merry Coal Company.



This portable building is being used for tool storage house for truck repairs at one of the large operations.



One of the large operations uses wire rope mats over overburden shot holes to keep rock from flying, allowing nearby drilling units to continue work without interruption.



One of the large operations uses portable switch houses for each of its electric shovels. A short or fault in power cable automatically cuts off power to only one shovel.



Eight yard ESCO dragline bucket strips overburden and recovers coal at one of the operations of J. Robert Bazley, Inc.



Loading out one of the thinner seams of coal, overlying the Mammoth seam, at one of the larger operations.



A new rotary type electrical-driven shot hole drill is being used at one of the large operations.



Lima 1201 dragline with 2 1/2 yard Page bucket moving rock bank near Gilberton.



A 2-1/4 yard A. B. C. bucket loading out coal at an operation near Ashland.



Eight yard dragline moving slush bank to get vein of coal under it, near Gilberton.



A D-8 Caterpillar tractor pushing slush bank before the 8-yard dragline near Gilberton.

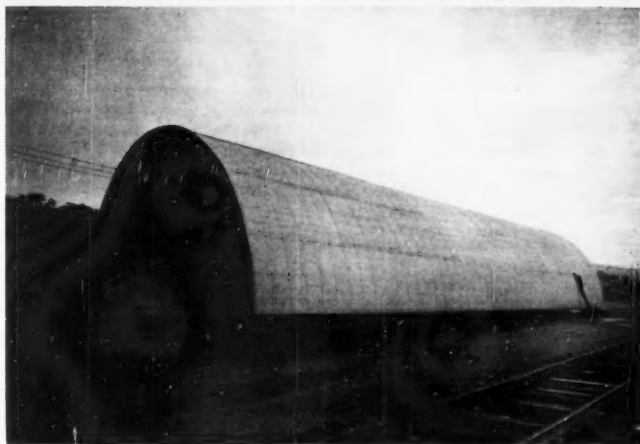


ABOVE: The same dragline spilling overburden.

LEFT: A Model 621-S 8-yard Page dragline digging overburden near Hazelton, Pa.



J. A. and W. A. Hess, Inc. Heave an operation on the Conyngham Mountain near Hazelton, Pa., at which they are recovering pillar coal left in the Mammoth seam running 5 feet thick and the Wharton and Primrose seam running from 7 to 10 feet thick. An Osgood Model 1007 dragline with 2½ yard Pittibone bucket moves up to 50 feet of clay and rock burden. The seams lie on a 90 degree pitch and two of them are found 2 to 10 feet apart. Stripping is done around the clock. One deep cut is planned and 18 cubic yard Euclid trucks will be used to haul overburden.



→ Large Quonset Hut being used for truck tire repair and storage.



LeTourneau Teaurapull pusher loaded at an overburden at the Logan operation of J. Robert Bazley near Ashland.



Lorain shovel loading coal in Sterling truck at the Logan operations of J. Robert Bazley.



Above: Electric power cable fault finding and repair shot at one of the larger operations in the southern Anthracite region.

Right: The Impulse Fault Locator causes a noise like a pistol shot to occur at a fault in the electrical insulation of a conductor. This noise is audible and, therefore, the fault can readily be located without reading instruments or making calibrations. It produces this noise by charging a condenser inside the apparatus and discharging it into the circuit suddenly. The wave travels along the conductor to the fault where it produces an arc. Considerable energy is released in a very short time, producing a sound. The condenser is again charged and the procedure is repeated at intervals of 1 to 2 seconds for as long a time as required to locate the defective spot in the insulation. The principal parts of this tester consist of, First, a 15KV transformer. This transformer has its primary winding tapped for 110-200 or 400 volts and a secondary winding of 15,000 volts. Second, a filament and relay transformer. This transformer has a double winding. The filament winding is used to heat the filament of a GL8020 Vacuum Tube rectifier, which is used to charge a 15KV-2 Microfarad Pyranol filled condenser, the relay winding of the transformer is used to operate a time delay relay which allows the filament of the vacuum tube to heat up before the main transformer is energized. It also consists of a variable sphere gap in series with the high tension test lead. A mercury switch mounted on a condenser discharging switch disconnects the power from the tester when the condenser is short circuited which must be done before test leads are handled after a test is made. All this is enclosed in a heavy plywood box with a glass top through which knobs protrude which enables the operator to see and operate the sphere gap and discharge switch. This box with lid measures 18" wide, 21" high and 26" long and weighs about 100 lbs. All test jacks are recessed and when test plugs are inserted, preclude all possibilities of the operator coming in contact with any high voltage terminals. This tester together with a 6 Volt DC to 110 Volt AC inverter can be used mostly anywhere. This tester is designed by J. E. Johnson, Electrical Engineer, for Philadelphia Electric Company and made by R. G. Goodyear and Sons of Philadelphia, Pennsylvania.

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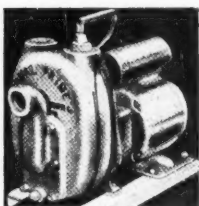
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THE LEETONIA TOOL CO., LEETONIA OHIO



Overall view of the Kaminski Brothers operation at Avoca, in the Northern region.

Kaminski Brothers Use Variety Equipment To Strip Flat Seam Of Anthracite Coal

At Avoca, in the Northern field, Kaminski Brothers, Inc., stripped 20 to 30 feet wide pillars of the Pittston seam on property of the Jermyn Greene Coal Co., running 18 ft. in thickness. Some solid coal of the

Marcey seam running from 4½ to 5 feet thick was also stripped. Overburden on the Pittston seam ran 50 feet in thickness. 15 feet which was slate and 35 feet was hard rock. The rock was drilled with wagon

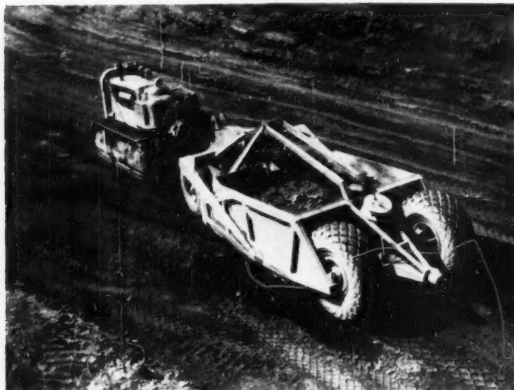
drills. Rock was loaded by power shovel into Athey Wagons, powered by DW 10 Caterpillar Tractors, and hauled up to 500 feet. Coal was loaded with Page 2½ cubic yard dragline buckets.



Athey wagon being dragline loaded with overburden at the Kaminski Brothers operation.



Athey wagon dumping rock on spoilbank at the Kaminski Brothers operation.



Model HD-19 Allis-Chalmers Diesel tractor pulling 24 cubic yard Gar Wood Cable Operated Scraper, stripping overburden on coal at the operation of the Dunwell Contracting Corp. near Saltsburg, Pa.



Close up view of the Model HD-19 Allis-Chalmers Diesel tractor and Gar Wood Scraper at the Dunwell Contracting Corp.

Scrapers Strip All Overburden at the Dunwell Pits

One of western Pennsylvania's most highly mechanized stripping operations is that of the Dunwell Contracting Corporation near Saltsburg.

This progressive company employs a large variety of modern mining equipment.

Allis-Chalmers HD-19 Tractors

with Carco cable-controlled bulldozers work around the shovel bunch overburden, clean the face of the coal and build drainage ditches and roads. These tractors also serve as pushers to help coal trucks out of the pit.

Actual stripping work is handled by other HD-19's and 24 yd. Gar Wood cable-operated scrapers with

additional HD-19's as pushers when needed.

Good roads are essential in every successful mine operation. Dunwell uses a Model 4D-3 Allis-Chalmers Road Patrol Grader powered by a General Motors Diesel Engine to clean the top of the coal in the mine pit and to maintain haulage roads.



Model AD-3 Allis-Chalmers Road Patrol Grader equipped with G. M. Diesel Engine cleans coal and maintains haul-roads at Dunwell Contracting Corporation, Saltsburg, Pa.



Model HD-19 Allis-Chalmers Diesel driven tractor equipped with Carco Cable controlled Bulldozer pushing truck loaded with coal out of the pit at Dunwell Contracting Corporation.

These Coal Miners Never Touch Coal!



Modern mine machinery is a 20th century marvel, and it's just good business to put its care in the hands of first-class mechanics and machinists. And good machine shops cost money, a lot of it. For instance, the one shown above, with its equipment, cost all of \$150,000. It serves but a single mining operation.

Expenditures like this are necessary in modern coal mining, because today miners rarely touch pick and shovel. Instead, their hands operate the controls of machines. The "heavy work" is done by mechanized horsepower. A cutting machine, an automatic loader, and a shuttle car, whose combined cost adds up to a \$60,000 coal mining team, must be kept in top shape to justify the heavy investment.

So mechanized mining, with its need for keeping machines in good running order, has created a new kind of "miner"—the machinist, the electrician, the welder, who keep mine horsepower on the go.

Modern mining practices are a far cry from those of "pick and shovel" days. Today mines are "blueprinted" in advance. Backed by facts learned from geological surveys, engineers can plan mine layout, without running into costly alterations due to unexpected faults in rock and seam formations.

Such planning permits speedy handling of coal from seam to surface for washing, sizing and grading in preparation plants. The result is mass production of many grades of coal, each especially adapted to efficient use in one or another of the many different types of furnaces in America's homes and industries.

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New building of the Ohio Machinery Company at Youngstown.

Ohio Machinery Co. Opens Youngstown Branch

Ohio Machinery Company, with branches in Cleveland, Columbus and Toledo, Ohio, opened another branch in Youngstown, Ohio, on Saturday, July 18.

The Youngstown building covers approximately 25,000 sq. ft., including the small painting and cleaning building in the rear. There is an approximate 9,000 sq. ft. area set aside for parts bins and parts storage; 10,000 sq. ft. for service; the show room covers an area of about 3,000 sq. ft.; and the balance is in sales, parts and service offices.

Approximately 850 people at-

tended this opening. Lunch was served with music and entertainment.

The manufacturers' representatives who attended included men from the Caterpillar Tractor Co., the Thew Shovel Company, Gardner-Denver Company, J. I. Case Company, Martin Machine Co., Ottawa Steel Products Co., Union Wire Rope Corp., Iowa Manufacturing Company, Athey Products Company, Hyster Company, Trackson Company, and Mall Tool Co.

Officers and representatives of neighboring "Caterpillar" distributors, were also there.

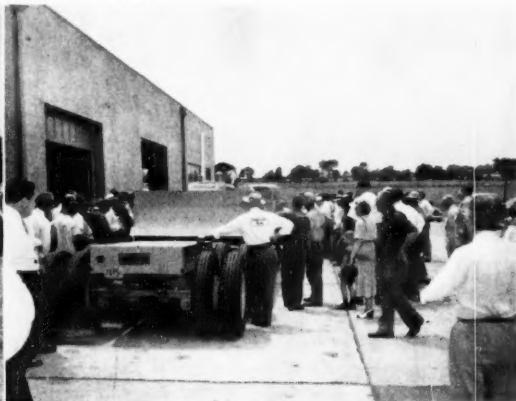
As a sidelight, The Thew Shovel

Company chartered a bus and brought about thirty of its key personnel from Lorain to attend this showing.

Demonstrated were different products throughout the day. Some of the newer types of equipment proved very interesting. For instance, a D-4 "Caterpillar" Tractor with a new Trackson hydraulic front end loader which loaded trucks. Also demonstrated was the Martin FG4 folding gooseneck trailer which is the only one of its kind on the market and having a capacity of approximately 20 to 27 tons.



Visitors watching a Caterpillar tractor with Trackson hydraulic front end loading a truck



Visitors observing the construction of the F G 4 folding gooseneck trailer.

SAINT FRANCIS COLLEGE GRADUATES MINING STUDENTS

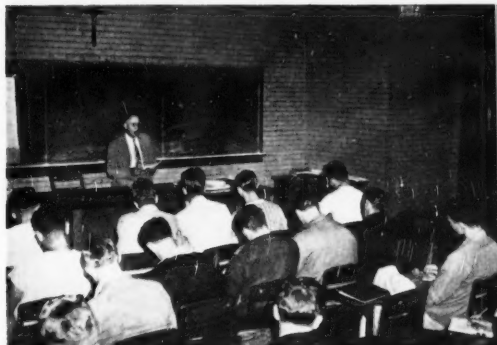
On Friday evening, August 5, 1949, in Doyle Hall on the campus. The Very Reverend Adrian J. M. Veigle, T.O.R., Ph.D., President of St. Francis College, Loretto, Pennsylvania, issued certificates and awards of completion of a three summer session in detailed mining operation to twenty-nine of thirty-one of the initial students who comprise the first graduating class of the school of mines at St. Francis College.

According to the educational authorities of the Federal Government, this is the only school of its type in this country. Miners who have attended the session are for the greater part married men and are

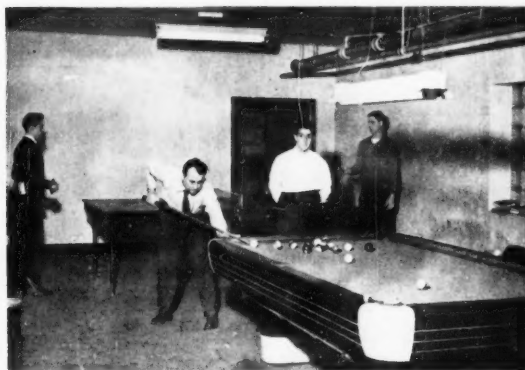
(Continued on Page 33)



St. Francis College, Loretto, Pennsylvania.



Above: Class room scene taken in Schwab's Science Hall. Right: A banquet attended by the mining graduates at the Oriental Ballroom in Gallitzin prior to the awarding of certificates. The graduates were addressed by John H. Dougherty, lecturer at the School of Mines. To the right of Mr. Dougherty is the Reverend Francis J. Flanagan T.O.R., Director of the Summer School and to his left is the Very Reverend Adrian J. M. Veigle T.O.R., Ph.D., President of Saint Francis College.



The Campus Club, located in Doyle Hall, is the scene of activities during the students' leisure hours. The club is equipped with Pool and Ping-Pong Tables, a "Snack" bar, and a well-equipped lounge.



Intra-mural athletic rivalry is encouraged at Saint Francis. A schedule of games between the mining students and the regular students attending summer sessions are under the direction of James P. Burke of the Department of Philosophy.



Paul Bella, Graduate, Indiana High School, '42



Joseph Bukowsky, Graduate, Clymer High School, '40



Carlisle Campbell, Graduate, Indiana High School, '40



Harold A. Cassidy, Graduate, Lilly High School, '38



Michael E. Checlosky, Graduate, Homer City High School, '41



Andrew J. Chonko, Graduate, Cresson High School '32



Alfred W. Donaldson, Graduate, Homer City High School, '41



Harold B. Frenz, Graduate, Green Twp. High School '37



Irafford Freeman, Graduate, Barnsboro High School, '41



William W. Hutchinson, Graduate, Punxsutawney High School



Peter Kopchik, Graduate, Homer City High School, '42



Andrew J. Koral, Graduate, Hastings High School, '35



Anthony J. Kratzen



Patrick J. Lynn, Graduate, Hastings High School, '37



William J. McGreehan, Beaverdale High School



Frank Meden, Graduate, Beaverdale High School, '36



John O. Miller, Graduate,
Hastings High School, '36



Joseph L. Peresid, Graduate,
Cowanshannock Township
High School, '42



Oscar N. Plazek, Graduate,
Cresson High School, '39



John Palitko, Graduate,
Sykesville High School, '37



Michael J. Poponick, Grad-
uate, Homer City High
School, '42



Michael M. Sally, Graduate,
Windber High School, '49



Thomas J. Salva, Graduate,
Elders Ridge Vocational
School, '42



George W. Shannon, Ebens-
burg High School.



Jack W. Sweltz, Graduate,
Beaverdale High School, '42



John L. Iontala, Graduate,
Blacklick Township High
School, '44



Anthony E. Valeri, Ebens-
burg High School



John C. Wagner, Graduate,
Barnsboro High School, '41

(Continued from Page 31)

employed by fifteen different companies in the soft coal area. The companies to which they are affiliated not only sponsor them at the school but continue to pay on a full pay arrangement while they are attending.

The courses while they are accelerated are intensified and cover every phase of mining engineering and de-

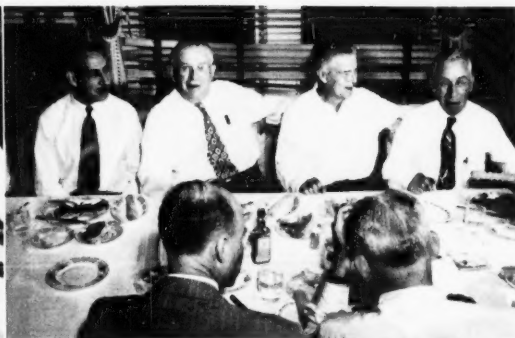
veloping. Since attending the school, many of these men have become assistants and mine foremen which entails an up-grade and classification. The school has tripled its size since its beginning three years ago and has attained a national recognition among the owners and operators as well as the United Mine Workers of America.



Attilio L. Zamin, Nanty-Glo High School



E. C. (Andy) Anderson, Electrical Engineer, H. C. Frick Coke Company; Dennis L. McElroy, Vice President of Engineering, Pittsburgh Consolidation Coal Company, and H. C. Rose, Vice President in Charge of Operations, Pittsburgh Coal Company.



G. A. Shoemaker, President, Pittsburgh Coal Company, Frank Dunbar, Retired, Francis McQuillen, West Penn Power Company, and Ed Seeman, Division Manager, Hillman Coal & Coke Company.

Coal Operators Golf Party

The Bituminous Coal Operators Golf Association of Western Pennsylvania met at the Nemacolin Country Club near Brownsville, Pa., for its third Party of the season on July 21. The three-day work week in the industry enabled more guests than usual to attend this party. Color motion pictures of the participating golfers were taken by Willis S. Drake, Sales Manager for COAL MINING, and will be shown at the next meeting of the association at the Uniontown Country Club. Accompanying are pictures taken at the dinner following golf.



Doc Young, Timken Roller Bearing Company; Ed Lee, Lee-Norse Company, and Francis McQuillen, Assistant to the President, West Penn Power Company, doing entertaining after dinner.



Ed Sieman, Division Manager, Hillman Coal & Coke Company; George M. Rigg, Vice President in Charge of Operations, Weirton Coal Company; L. E. Young, Consulting Mining Engineer, and Bill Simpson.



J. R. McVickers, Mining Engineer, and J. H. Bolender, Electrical Engineer, both of Republic Steel Corporation.



M. H. Forrester, Vice President, Pittsburgh Consolidation Coal Company; O. C. Crump, President, and Herb Brown, Vice President, Brown-Fayro Company, Johnstown, Pa.; A. N. Cartwright, A. J. Breitenstein, Chief Engineers, H. C. Frick Coke Company; Jack Connor, Vice President in Charge of Operations Windsor Power House Coal Company; Ed Vant, Jeffrey Manufacturing Company, and H. W. Prindle, Salesman, Bethlehem Steel Corporation.



Among those that can be recognized in this picture are: R. E. Vokach, West Penn Power Company; H. E. Horner, Purchasing Agent, Greensburgh-Connellsville Coal Company; B. H. Madera, Carpentertown Coal & Coke Company; S. E. Kane and Leo J. Schute of Mosebach Electric & Supply Company, and John Palin, General Superintendent, Greensburg-McConnellsville Coal & Coke Company.



Left: C. M. Donahue, Manager Mining Department Mine Safety Appliances Company; George Trevorrow, General Manager of Mines, Wheeling Steel Corporation, and Jack McKenna, State Mine Inspector, Waynesburg, Pa.



K. E. Caine, Sales Engineer, R. C. Beerbower, Branch Manager, Goodman Mfg. Company, and L. O. Lounge, Engineer, Baton Coal Company.



E. R. Cooper, Manager of Mines, Jones & Laughlin Steel Corporation, and Dick Johnson, Mine Safety Appliances Co.



Howard Miller, Elec. Eng., Crucible Fuel Co. Bill Schiffbauer, foreman, Buckeye Coal Co. and Right: H. L. Lang, Industrial Electric Co., Washington, Pa.



Paul M. Becker, Mine Safety Appliances Company; W. G. Stevenson, General Manager, Hillman Coal and Coke Company, and Joe Kelly, H. C. Frick Coke Company.



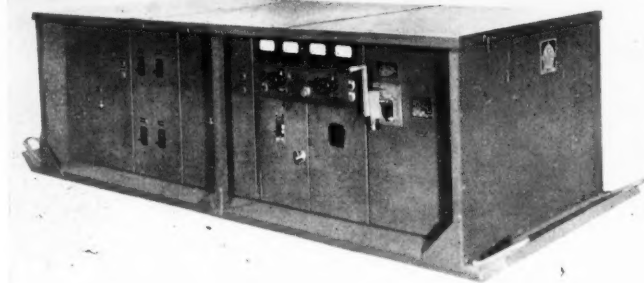
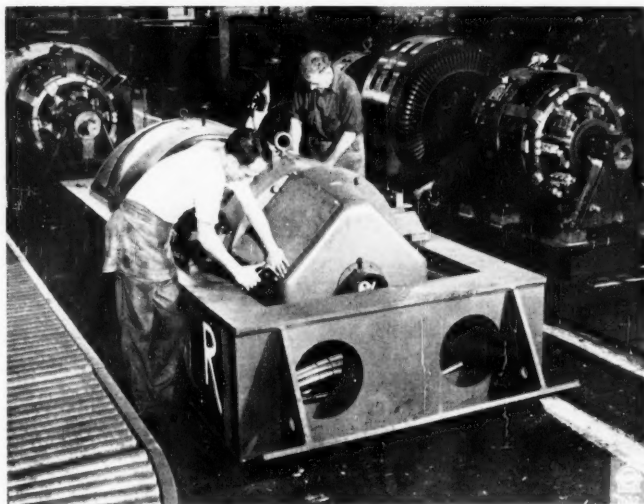
C. H. Dorsey, President, R. G. Johnson Company; A. R. Werft, Assistant Mechanical Engineer, H. C. Frick Coke Company, and Woody Johnson, R. G. Johnson Company.

New Portable 300 KW Underground Motor Generator Set For Continuous Mining Machines

Designed expressly to meet the new requirements for direct-current power for mining coal with recently developed continuous-type machines, a portable 300-kw motor-generator set, complete with auxiliary control switchgear, was announced by The Reliance Electric & Engineering Company, a major manufacturer of specialized electrical equipment for industrial applications.

The new portable motor-generator set, according to C. E. Hugus, Reliance Supervisor of Mining Applications, has been designed "to provide a portable underground power source for supplying the current required by the introduction of the new continuous mining machine operations of cutting, drilling, blasting and loading of coal into a single integrated performance.

"Equipped with as many as seven motors, totalling over 160 hp., these continuous mining machines require more direct current than is presently available in some mines," Hugus explained. "Our new motor-generator set is designed to answer this problem in mines lacking adequate d-c. generating facilities or short on underground electrical circuits of sufficient capacity to deliver the power to its point of use," he said.



Dimensions of the new motor-generator set accentuate unusual compactness of design and relative light weight. Under 43 inches high, 7 feet wide, and 15 feet long, it weighs

approximately 19,000 pounds, and is ideally suited for use in the confined areas of low head room where continuous mining machines will operate.

NEW DIESEL-ELECTRIC SHUTTLE CAR

The Joy Manufacturing Company Oliver Building Pittsburgh 22, Pa., announces the development of a new diesel-electric shuttle car. This model is said to be exceptionally powerful and can operate on steeper



grades than either battery or cable-reel cars. Since it carries its own power source, the car is extremely flexible in operation. The fuel capacity is amply great to provide rated power throughout the full shift.

The 60-E-11, as the car is designated, is powered by a single diesel-generator set. Engineers of the engine manufacturer collaborated with Joy engineers to produce a lightweight, compact engine, especially suited for shuttle car use.

Specifications of the 60-E-11 are as follows: height, 60"; capacity, 285 cu. ft.; capacity with 6" sideboards, 330 cu. ft.; load limit, 14 tons; length, 24' 0"; width, 7' 10"; ground clearance, 11 1/2".



Earl R. Herb

The Osgood Company and The General Excavator Company, of Marion, Ohio, announce the appointment of Mr. Earl R. Herb as District Sales Manager in the states of North and South Dakota, Minnesota, Wisconsin, Michigan, and the northern halves of Indiana and Illinois.

Mr. Herb will make his headquarters at Milwaukee, Wisconsin, and devote his time to supervising the

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A Complete Line of **DRAGLINES, POWER SHOVELS, CRANES, BACKHOES, PILE DRIVERS**
Crawler and Pneumatic-Tire Mounted
Diesel, Gas, Electric, 1/2 to 2 1/2 Cu. Yd.

There are a number of important, time-saving and money-making features built into every Osgood unit—complete Air Control of basic motions; an Air Cushion Clutch that provides top speed almost instantly, without lag, without grab or jerk; adjustable Hook Rollers, operating on the underside of the rotating gear to keep the upper body stabilized on the

crawler truck frame . . . fewer wearing parts, greater accessibility of machinery, larger diameter power-operated frictions, and many similar advancements.

Look to Osgood for cranes, shovels, draglines, backhoes, and pile drivers that will give you more work every day, better performance, easier operation, longer life, larger profits!

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EXCAVATOR
MARION OHIO
DIESEL GASOLINE OR ELECTRIC POWERED • 1/2 TO 2 1/2 CU. YD. • CRAWLERS & MOBILCRANES

sales and service of OSGOOD and GENERAL power shovels and material handling equipment, working closely with the OSGOOD-GENERAL distributors in his territory. These distributors are: Boeck Equipment Co., of Milwaukee; The F. Lake Machinery Co., of Grand Rapids, Michigan; The Telford Equipment Company, of Detroit and Lansing, Michigan; The Manning Equipment Company, of Lansing, Illinois; The Talbert Construction Equipment Company of Lyons, Illi-

nois; The Pecaut Industrial Supply Company, of Sioux Falls, South Dakota and Swanston Equipment Co. of Fargo, North Dakota.

Mr. Herb has a wide experience in the construction equipment field. Prior to joining OSGOOD-GENERAL sales force, he spent more than eleven years in the heavy construction equipment field, eight of which were in the field calling upon contractors and allied industries. Mr. Herb is 41 years old, married, and has one child.

The Double - Roll Scottdale COAL CRUSHER

Really Sinks Its Teeth Into It!

That's right . . . the Scottdale double-roll Coal Crusher really sinks its teeth into the lumps of coal . . . the two rolls are set in a staggered position so that their teeth produce a shredding action on the coal. This Scottdale principle delivers a more uniform product and lowers the consumption and cost of power.

It's true you'll own the BEST when you buy a Scottdale double-roll Coal Crusher.

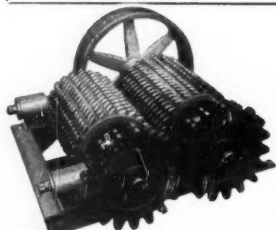
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New Elereco Fused Trolley Taps.

ELRECO Roof Suspension Bolt Assemblies

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Pittsburgh 24, Pa.

"Flotation," the theory, application and result, is treated in a new bulletin published this month (July, 1949) by the Denver Equipment Company. A copy of this new bulletin will be sent to Coal Mining readers on request. Address, Denver Equipment Company, Dept. 313, 1400 Seventeenth St., Denver 17, Colorado.

Originally developed for recovery of mineral values from complex ores, the froth flotation process is now used by many industries. In addition to processing metallic and non-metallic ores (more ore is processed by flotation than any other single method of mineral recovery), flotation is used to de-ink paper pulp; recover oils, greases and metal filings from manufacturing wastes; processing refuse from food canneries, meat packing plants, distilleries, textile mills and other organic chemical processing plants. Rubber resin has been extracted from vegetation, coarse hulls are peeled from wheat grains, fungus growths are recovered for use in medicines, copper is removed from gasoline, naphthalene is recovered as a by-product from coke washing water—all through use of this "mineral recovery" principle.

Coal fines, which otherwise would be lost as waste in slurry water, are cleaned and recovered profitably through use of flotation.

Development of new chemical reagents has resulted in many new uses for flotation, including recovery of industrial by-products heretofore discarded and lost through waste.

George L. Wilson, Jr., has joined his father's company, the George L. Wilson Company of Pittsburgh, purveyors in heavy duty machinery and coal stripping supplies.

Mr. Wilson will take an active part in the sales organization of the company, is in his senior year at Carnegie Institute of Technology, specializing in mechanical engineering.

— Please say you saw it in Coal Mining —

SALEM "HERCULES" AUGERS FOR ELECTRIC DRILLS

Made To Withstand High Drilling Speed, Whip And Torsional Strain Of Electric Drills



Drills holes faster — Will not snap off shank or chip points — Outlasts four or five ordinary augers.

THE SALEM TOOL COMPANY

SALEM, OHIO, U.S.A.

A new 24-page book captioned "Euclid Loader for High Speed Loading of Large Hauling Units" has just been issued by the Euclid Road Machinery Co.

This book contains a large number of operating views showing the Loader at work on various jobs in this country and abroad.

— o —

Publication of a new data sheet and application bulletin on HEAT-REM, high heat resisting aluminum paint, is announced by Speco, Inc., Cleveland.

HEAT-REM, according to the manufacturer, is suitable for use on all interior or exterior hot surfaces subject to 1000° to 1500° F. It may be applied by either brush or spray, sets in 4 hours and dries in 24 to a brilliant, hard finish. It resists fumes, moisture and acids. Average coverage is 600 sq. ft. per gallon.

— o —

Speco, Inc., 7308 Associate Ave., Cleveland 9, Ohio.



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**CONVEYOR BELT
CARRIED IN STOCK!**

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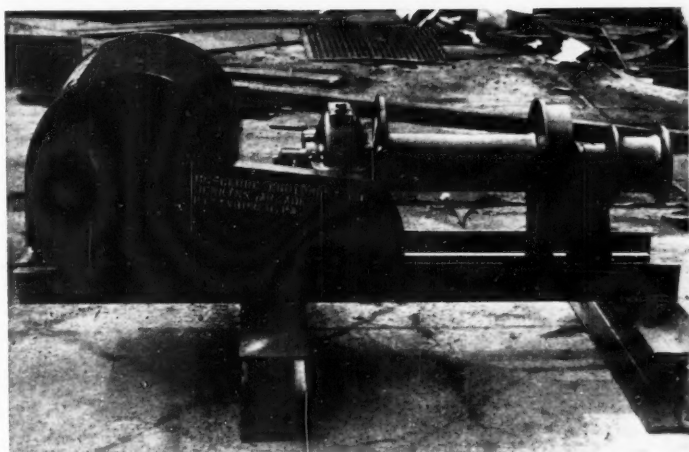
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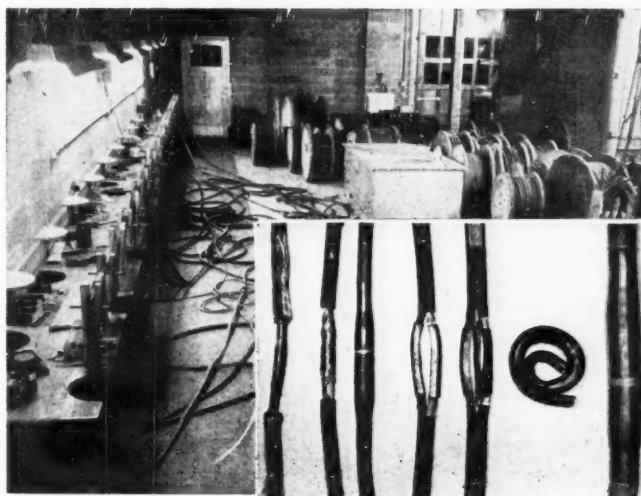
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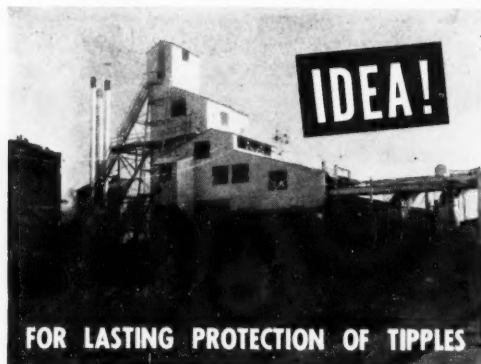


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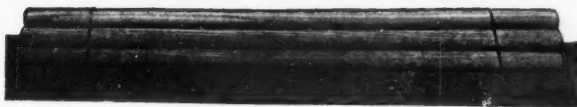
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1	200	Westinghouse	720
2	200	Westinghouse	1200
1	100	Westinghouse	700
1	100	General Electric	900
1	100	Westinghouse	600
1	100	General Electric	1800
1	100	Reliance	580
1	100	Delco	1200
1	90	Westinghouse	680
4	75	Westinghouse	720
1	75	Westinghouse	1200
1	60	Westinghouse	1200
1	NEW	General Electric	1800
3	40	Westinghouse	900
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1	250	West.	1200
1	175	G. E.	700
3 New	135	G. E.	1150
1	125	West.	560
1	125	Allis-Chal.	1150
1	110	West.	700
1	100	Allis-Chal.	1150
1	75	West.	750

No.	KW.	Make	Speed
1	125	West.	257
1	450	Elec. Machy.	120

Qus.	Gpm.	Head	Kind	Make	Speed
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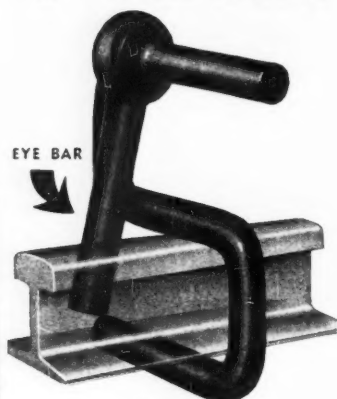
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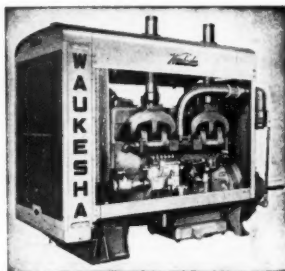
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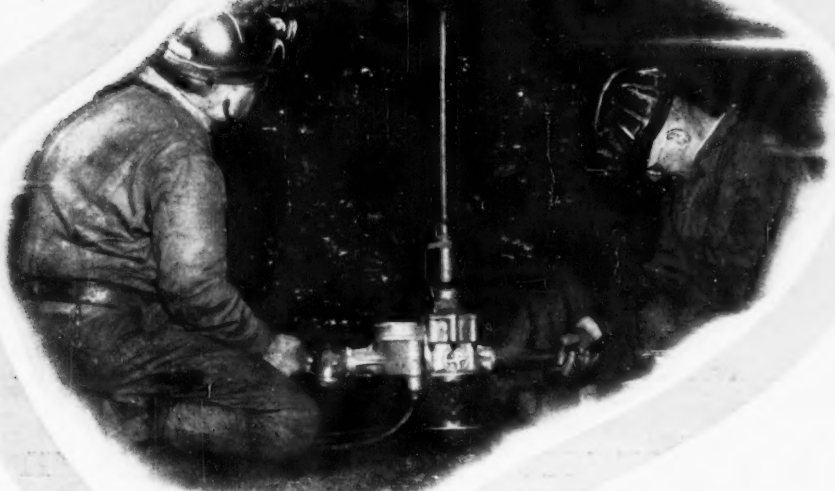
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